

CAPITAL REQUEST APPROVAL FORM

Original ☒Revision ☐Location: Desert View PowerProject Number: 3029-00-191Project Name: Primary Superheater Replacement

Project Type: _____

Project Description Summary - Purpose and Benefit:

DVP has suffered 18 primary super heater tube leak forced outages in 2016 and 2017. DVP will install 42 new primary super heater platen assemblies in each boiler during the scheduled spring 2018 outage. Installation of the new finishing superheater platen assemblies is expected to reduce boiler back pass related forced outages by about 50%.

Submitted By: James R. HuffmanDate Submitted: 2/28/2018Project Start Date: Feb-18Construction Start Date: Mar-18Budgeted Project: Yes ☒ No ☐Service Start Date: Mar-18If yes, \$ Amount in Annual Budget (\$000): \$1,250Project Completion Date: Mar-18**PROJECT COST ESTIMATE:**

Materials and Outside Labor (Description):	Amount	Total
Finishing superheater tubes (materials)	\$ 500,000	
Installation labor	\$ 750,000	
Subtotal-Materials and Outside Labor		\$ 1,250,000

Other Project Costs (Description):

Subtotal-Other Project Costs		\$ -

SUBTOTAL \$ 1,250,000

Engineering 0.0% -

Contingency and Estimating Allowance 0.0% -

Interest During Construction 0.0% -

SUBTOTAL \$ -**TOTAL ESTIMATED COST OF PROJECT** \$ 1,250,000

APPROVALS:

Signature and Date

Board Member

President

Controller

Senior VP, Operations

Plant Manager

Originator

Hugh Lott

James R. Hoffman

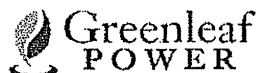
For Corporate Use Only:

☐ Project Approved

☐ Project Declined

Notification Date: _____

☐ Further Action Required:



CAPITAL REQUEST ANALYSIS FORM

Original [X]
Revision []

Location: Desert View Power Project Number: 0

Project Name: Primary Superheater Replacement Project Start Date: Feb-18

18 MONTH CASH FLOW AND PROJECT COMPLETION SCHEDULE:

	Carryover	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18
Expenditures (\$ 000)	<u>\$ -</u>	<u>\$ 500</u>	<u>\$ 750</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Cumulative % Complete	<u>0%</u>	<u>40%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>
	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19
Expenditures (\$ 000)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Cumulative % Complete	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>
	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Forward	TOTAL
Expenditures (\$ 000)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 1,250</u>
Cumulative % Complete	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	

FINANCIAL IMPACT SUMMARY: (Derived from Proforma Income Statement)

Annual Savings	<u>\$ -</u>	Debt Coverage Average	<u></u>
Increase in annual volume: Sales	<u>\$ -</u>	Debt Coverage Minimum	<u></u>
R.O.A. before tax	<u></u>	Equity Payback	<u>\$ -</u>
I.R.R. after tax	<u></u>	Change in energy efficiency	<u></u>

ADDITIONAL CORPORATE SUPPORT REQUIRED:

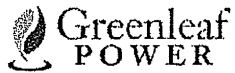
- | | |
|--|--|
| <input type="checkbox"/> Service Interruptions | <input type="checkbox"/> Environmental Assessments |
| <input type="checkbox"/> Plant Shutdowns | <input type="checkbox"/> Water/Land/Air Easements |
| <input type="checkbox"/> Additional Personnel | <input type="checkbox"/> Regulatory Approval |
| <input type="checkbox"/> Customer Agreements | <input type="checkbox"/> Special Permits |
| <input type="checkbox"/> Street Openings | <input type="checkbox"/> Safety |
| <input type="checkbox"/> Right-of-Way Issues | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Zoning Issues | <input type="checkbox"/> Other: _____ |

SUPPORTING SCHEDULES:

(Please List and Attach)

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

POST COMPLETION DATE OF REVIEW:



CAPITAL REQUEST NARRATIVE SUMMARY

Original ☒ [X]
Revision ☐ []

Location: Desert View Power

Project Number: 0

Project Name: Primary Superheater Replacement

Project Start Date: Feb-18

Background:

The primary super heater platen assemblies are in the highest erosion zone of the boiler backpass. Over time, the primary superheater platen assemblies suffer degradation and ash erosion. In 2017 & 2017 there were 18 primary superheater platen tube leak forced outages resulting in more than 16,000 MWh lost generation. The primary superheater platen assemblies were last replaced in 2000. Replacement of primary superheater platens is normal in the industry, and generally follows a ten to twelve year replacement cycle.

Description:

Each boiler contains 42 primary super heater platen assemblies. The new primary super heater platen assemblies were designed and fabricated to be direct replacements of the in service platen assemblies. The new primary super heater platen assemblies included upgraded tube hanger systems to eliminate platen shifting into the gas path lanes and will reduce platen degradation and erosion.

Implementation:

DVP will contract boiler maintenance contractors to prepare, install, and proof test 42 primary super heater platen assemblies in each of Boiler #1 and Boiler #2. Preparation will include installing tube shields to protect high erosion areas, cleaning tube internals, and enhancing tube hanger lanes. Installation will include demolition of the in service platens, inspection and repair of the boiler cavity surrounding the platens, installation of the platens and hanger systems, and all related tasks. Proof testing will include hydrostatic pressure testing of all boiler water/steam systems to ensure weld quality.

Capital Cost:

The purchase of the primary superheater platen sections was included in the approved 2018 budget. The project labor, equipment, tools, & consumables cost includes all preparation, demolition, installation, proof testing, and clean-up necessary to replace the finishing super heater platen assemblies was included in the approved 2018 budget.

Benefits:

DVP expects to eliminate primary super heater tube leak forced outages for the next three to five years. Eliminating the primary super heater tube leak forced outages will reduce all boiler tube leak forced outages by approximately 50%.

Violeta Hernandez

From: Armina Stupar
Sent: Monday, March 12, 2018 9:46 AM
To: Charlie Abbott; Russell Huffman; Violeta Hernandez
Subject: FW: DVP Primary Superheater Replacement Project Capital Account Number Request
Attachments: DVP Capital Request Form Primary Superheater Replacement Project rh.pdf

Good morning,

The email approval will work just fine but I am forwarding this to Violeta as she handles all CapEx.

Thank you,
Armina

From: Charlie Abbott
Sent: Monday, March 12, 2018 9:44 AM
To: Armina Stupar <AStupar@greenleaf-power.com>
Cc: Russell Huffman <RHuffman@greenleaf-power.com>
Subject: FW: DVP Primary Superheater Replacement Project Capital Account Number Request

Armina:

I won't have access to a printer for a bit. Can you use this email as approval?

Charlie

From: Russell Huffman
Sent: Monday, March 12, 2018 9:21 AM
To: Charlie Abbott <CAbbott@greenleaf-power.com>
Cc: Armina Stupar <AStupar@greenleaf-power.com>; Mitchell Martin <MMartin@greenleaf-power.com>
Subject: DVP Primary Superheater Replacement Project Capital Account Number Request

Charlie,

Here is the form requesting a capital account number to be generated for the Primary Superheater Replacement Project. All monies were approved in the 2018 capital budget for DVP.

James R. Huffman

V.P. of California Operations
Greenleaf Power, LLC
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(760) 393-1308
rhuffman@greenleaf-power.com